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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,107	02/20/2004	Mark G. Romo	R11.12-0837	6918
27367 7590 08/09/2007 WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3319			EXAMINER SONG, SARAH U	
			ART UNIT 2874	PAPER NUMBER
			MAIL DATE 08/09/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/784,107	Applicant(s) ROMO ET AL.	
	Examiner Sarah Song	Art Unit 2874	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 37-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25,37-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Applicant's communication filed on April 10, 2007 has been carefully studied by the Examiner. The arguments advanced therein are persuasive and the rejections based upon prior art made of record in the previous Office Action are withdrawn. The finality of the rejection of the last office Action is withdrawn. Any inconvenience to the Applicant caused by the reopening of prosecution is sincerely regretted. Claims 1-25 and 37-39 are pending.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1, 12 and 37 rejected under 35 U.S.C. 102(e) as being anticipated by Hsu (U.S. Patent 6,954,579).**

4. Regarding claim 1, Hsu discloses an electrically variable optical attenuator comprising: a pair of waveguides 86 and 70, each having a terminus, wherein at least one terminus is movable relative to the other terminus upon urging from an electrically driven actuator; and a sensor disposed relative to the pair of waveguides to sense a variable (position, capacitance,) that affects attenuation, and provide a sensor output related to the variable. Hsu additionally discloses a controller adapted to compensate an attenuation level based on the sensed variable. See column 5, lines 30-49).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 2-11, 13-25, 38 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsu in view of Sharp et al. (U.S. Patent Application Publication 2003/0026581 newly cited).**

7. Regarding claims Hsu does not expressly disclose the claimed temperature sensors, wavelength sensor, acceleration sensor, or vibration sensor.

8. Sharp et al. discloses a VOA comprising a temperature sensor.

9. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a temperature sensor of Sharp et al. in the device of Hsu for the purpose of improving accuracy of the VOA by compensating for environmental effects, such as temperature as taught by Sharp et al. ¶0001.

10. Furthermore, various other sensors for sensing an anticipated parameter, such as the specifically claimed temperature sensors (including variable capacitor devices and resistance temperature devices), wavelength sensors, acceleration sensors, and vibration sensors are well known in the art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide any of the various sensors in the device of Hsu for the purpose of improving accuracy of the VOA by compensating for alternate environmental variables.

11. Hsu also does not expressly disclose the controller including memory containing a look-up table, a multidimensional look-up table, or coefficients for a function relating the sensed variable to attenuation. However, Sharp et al. discloses controllers including memory containing look-up tables, multidimensional look-up tables, or coefficients for a function relating a sensed variable to a desired result ¶0007. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the controller containing the claimed memory for the purpose of simplifying the control process.

***Response to Arguments***

12. Applicant's arguments with respect to claims 1-25 and 37-39 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sarah Song whose telephone number is 571-272-2359. The examiner can normally be reached on M-Th 7:30am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 571-272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2874

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah U. Song/  
Sarah Song  
Primary Examiner  
Art Unit 2874